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Attorney Docket No: END920030052US1 (1397-9U)

## **IN THE CLAIMS**

Please amend Claims 1, 10, 11, 12, 21, 22, 23, 25 and 26 as indicated.

1. (Currently Amended) A method for providing automated tracking of security vulnerabilities, comprising:

using a computing device to perform a security vulnerability assessment on a system; detecting the presence of a security vulnerability in the system; and responsive to detecting the presence of the security vulnerability:

storing data obtained from the security vulnerability assessment in a security vulnerability database;

determining, using a computer program, a computer program determining a security vulnerability score, the security vulnerability score being a product of based on a frequency score, a severity score, a criticality score, and a trust score, the frequency score based on a percentage of hosts experiencing the detected security vulnerability in the system and the criticality score based on whether at least one of confidential data and personal data is on the system and whether information on the element is used for aggregation; and

the computer program determining a time, based on the security vulnerability score, to fix the security vulnerability detected by the security vulnerability assessment of the system based on the determined security vulnerability score.

## 2. (Cancelled)

Filed: January 16, 2004

Attorney Docket No: END920030052US1 (1397-9U)

3. (Cancelled)

4. (Cancelled)

5. (Previously Presented) The method of claim 1 further comprising entering an IP address associated with the security vulnerability and a description of the detected security

vulnerability in a tracking database.

6. (Previously Presented) The method of claim 1 further comprising determining

delinquent security vulnerabilities based upon the determined time to fix the security

vulnerability detected by the security vulnerability assessment.

7. (Cancelled)

8. (Previously Presented) The method of claim 6 further comprising re-running a

scan profile when notification is received that the security vulnerability has been fixed.

9. (Previously Presented) The method of claim 8 further comprising determining

whether the security vulnerability still exists and archiving records associated with the security

vulnerability when the security vulnerability does not still exist.

3

Filed: January 16, 2004

Attorney Docket No: END920030052US1 (1397-9U)

10. (Currently Amended) A method for determining a criticality factor for a security vulnerability in a computer system, comprising:

entering in a database security vulnerabilities detected in the computer system during a security vulnerability assessment;

measuring a frequency of occurrence for the detected security vulnerabilities; and

a computer assigning a security vulnerability factor to a detected security vulnerability

based upon the frequency of occurrence of the security vulnerability in the system, a criticality of
an element in the system, a severity of the security vulnerability within the system, and isolation
of the system; and

a computer determining a time, based on the security vulnerability score, to fix the security vulnerability detected by the security vulnerability assessment of the system.

- 11. (Currently Amended) The method of claim 10, wherein the criticality of an element in the system is based on whether at least one of confidential data and personal data is on the system and whether information on the element is used for aggregation.
- 12. (Currently Amended) An apparatus for providing automated tracking of security vulnerabilities, the apparatus comprising:
  - a computer-readable memory;
  - a computer-readable tangible storage device for storing program instructions; and
- a processor, configured according to execute the program instructions for via the computer-readable memory, the program instructions when executed by the processor:

Filed: January 16, 2004

Attorney Docket No: END920030052US1 (1397-9U)

performing a security vulnerability assessment on a system; detecting the presence of a security vulnerability in the system; and responsive to detecting the presence of the security vulnerability:

storing data obtained from the security vulnerability assessment in a security vulnerability database;

determining a security vulnerability score[[,]] the security vulnerability score being a product of <u>based on</u> a frequency score, a severity score, a criticality score, and a trust score;

the frequency score based on a percentage of hosts experiencing the detected security vulnerability in the system; and

the criticality score based on whether at least one of confidential data and personal data is on the system; and

determining a time, based on the determined security vulnerability score, to fix a security vulnerability detected by the security vulnerability assessment of the system based on the determined security vulnerability score.

- 13. (Cancelled)
- 14. (Cancelled)
- 15. (Cancelled)

Filed: January 16, 2004 Attorney Docket No: END920030052US1 (1397-9U)

16. (Previously Presented) The apparatus of claim 12, wherein the processor enters an IP address associated with the security vulnerability and a description of the detected security vulnerability in a tracking database.

17. (Previously Presented) The apparatus of claim 12, wherein the processor identifies delinquent security vulnerabilities based upon the determined time to fix the security vulnerability detected by the security vulnerability assessment.

## 18. (Cancelled)

- 19. (Previously Presented) The apparatus of claim 17, wherein the processor re-runs a scan profile when notification is received that the security vulnerability has been fixed.
- 20. (Previously Presented) The apparatus of claim 19, wherein the processor determines whether the security vulnerability still exists and archives records associated with the security vulnerability when the security vulnerability does not still exist.
- 21. (Currently Amended) An apparatus for determining a criticality factor for a security vulnerability in a computer system, the apparatus comprising:
  - a computer-readable memory;

a computer-readable tangible storage device for storing program instructions; and

Filed: January 16, 2004

Attorney Docket No: END920030052US1 (1397-9U)

a processor, to execute configured according to the program instructions for via the computer-readable memory, the program instructions when executed by the processor:

entering in a database security vulnerabilities detected in the computer system during a security vulnerability assessment, measuring a frequency of occurrence for the detected security vulnerabilities; and

assigning a security vulnerability factor to a security vulnerability based upon the frequency of occurrence of the security vulnerability in the system, a criticality of an element in the system, a severity of the security vulnerability within the system, and isolation of the system, and

determining a time, based on the security vulnerability factor, to fix the security vulnerability detected by the security vulnerability assessment of the system.

- 22. (Currently Amended) The apparatus of claim 21, wherein the processor considers a criticality of an element in the system the criticality based on whether at least one of confidential data and personal data is on the system and whether information on the element is used for aggregation.
- 23. (Currently Amended) An apparatus for providing automated tracking of security vulnerabilities, comprising:

means for storing program instructions; and

means configured according to the program instructions provided by the means for storing for:

Filed: January 16, 2004

Attorney Docket No: END920030052US1 (1397-9U)

performing a security vulnerability assessment on a system; detecting the presence of a security vulnerability in the system; and responsive to detecting the presence of the security vulnerability:

storing data obtained from the security vulnerability assessment in a security vulnerability database;

determining a security vulnerability score, the security vulnerability score being a product of a frequency score, a severity score, a criticality score, and a trust score; the frequency score based on a percentage of hosts experiencing the detected security vulnerability in the system; and

the criticality score based on whether at least one of confidential data and personal data is on the system and whether information on the element is used for aggregation; and

determining a time, based on the determined security vulnerability score, to fix a security vulnerability detected by the security vulnerability assessment of the system based on the determined security vulnerability score.

## 24. (Cancelled)

25. (Currently Amended) A program storage device readable by a computer, the program storage device tangibly embodying one or more programs of instructions executable by the computer to perform a method for providing automated tracking of security vulnerabilities, the method comprising:

Filed: January 16, 2004

Attorney Docket No: END920030052US1 (1397-9U)

performing a security vulnerability assessment on a system;

detecting the presence of a security vulnerability in the system; and

responsive to detecting the presence of the security vulnerability:

storing data obtained from the security vulnerability assessment in a vulnerability database;

determining a security vulnerability score based on a frequency score, a severity score, a criticality score, and a trust score;

the frequency score based on a percentage of hosts experiencing the detected security vulnerability in the system; and

the criticality score based on whether at least one of confidential data and personal data is on the system and whether information on the element is used for aggregation; and

determining a time to fix, based on the determined security vulnerability score, a security vulnerability detected by the security vulnerability assessment of the system based on the determined security vulnerability score.

26. (Currently Amended) A program storage device readable by a computer, the program storage device tangibly embodying one or more programs of instructions executable by the computer to perform a method for determining a criticality factor for a security vulnerability in a computer system, the method comprising:

entering in a database security vulnerabilities detected in the computer system during a security vulnerability assessment;

Filed: January 16, 2004

Attorney Docket No: END920030052US1 (1397-9U)

measuring a frequency of occurrence for the detected security vulnerabilities; and assigning a security vulnerability factor to a security vulnerability based upon the frequency of occurrence of the security vulnerability in the system, a criticality of an element in the system, a severity of the security vulnerability within the system, and isolation of the system; and

determining a time, based on the security vulnerability score, to fix the security vulnerability detected by the security vulnerability assessment of the system.

- 27. (Original) The method of claim 1, wherein the severity score is based on whether a host will allow root compromise and whether the security vulnerability is remotely exploitable.
- 28. (Original) The method of claim 1, wherein the trust score is based on whether the system is isolated.
- 29. (Original) The apparatus of claim 12, wherein the severity score is based on whether a host will allow root compromise and whether the security vulnerability is remotely exploitable.
- 30. (Original) The apparatus of claim 12, wherein the trust score is based on whether the system is isolated.